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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,610	04/27/2007	Eduardo Aldecoa Anitua	ANITUA 6	8345
	7590 12/24/200 D NEIMARK, P.L.L.C	EXAMINER		
624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			LAWSON, MATTHEW JAMES	
			ART UNIT	PAPER NUMBER
			3775	
			MAIL DATE	DELIVERY MODE
			12/24/2009	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/588,610	ANITUA, EDUARDO ALDECOA				
Office Action Summary	Examiner	Art Unit				
	MATTHEW LAWSON	3775				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>01 O</u>	ctober 2009.					
	action is non-final.					
· <u> </u>						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>9-16</u> is/are pending in the application.						
4a) Of the above claim(s) <u>13-16</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>9-12</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>07 August 2006</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau		٩				
* See the attached detailed Office action for a list	or the certified copies not receive	u.				
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO_413)				
2) Notice of References Cited (PTO-992)  Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>5/24/2007</u> .	5)  Notice of Informal P 6)  Other:	atent Application				

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### **DETAILED ACTION**

### Election/Restrictions

- 1. Applicant's election with traverse of Group I, claims 9-12 in the reply filed on October 1<sup>st</sup>, 2009 is acknowledged. The traversal is on the ground(s) that the common technical feature of claims 9 and 13 of the retention zones does define a contribution over the prior art. This is not found persuasive because as claimed the first invention never positively recites "tissue retention zones." Further the applicants arguments are directed towards claims 6 and 12, claim 6 being a canceled claimed and are therefore moot. Lastly, the special technical feature the applicant is contending as claimed is functional and the device of Peltier is only required to be capable of performing this function which it is; any tool bit will accumulate some amount of residual material within the trough of the blade(s) and therefore would be a retention zone. The requirement is still deemed proper and is therefore made FINAL.
- 2. Claims 13-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 1<sup>st</sup>, 2009.

# Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes." etc.

The applicant currently uses legal phraseology as emphasized above within the body of the abstract along with the use or parenthesis which are to be avoided both within the abstract and the body of claims.

## Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It appears the applicant is attempting to incorporate by reference a previous application of theirs in the specification along with positively reciting this application

within the body of the claim. The applicant has failed to properly incorporate the reference within the body of the specification and further does not explicitly state what they are claiming or what is meant to be cited from the prior application within the claim.

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorneus et al. (US 5,741,267) in view of Yeung Wai Ping (US 2006/0111724) in view of Meller (US 2004/0210229).

Jorneus et al. disclose a milling procedure to be carried out on the bone, cartilage or other patient tissue in order to form a cavity (figures 2-5) of a shape and size that allows it to house an implant or prosthesis (figures 1 and 6) or for other purposes in which a cavity needs to be formed, with the procedure being based on the repeated application of various rotating milling tools (figures 2-6) on the tissue until the required cavity is formed, with the procedure comprising an intermediate phase in which the depth, width and other main features of the cavity are defined (figures 3-4) and an optional countersinking phase (figure 5) in which the mouth of the cavity is widened

Jorneus et al. do not disclose the intermediate, countersinking, or initial phase of tool use being operated at low speeds ranging from between 20 and 80 rpm, nor does

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Jorrneus et al. discloses no use of irrigation solution being applied on the tools, loose tissue particles, or the tissue surrounding the mill hole or cavity during the low speed milling process.

Yeung Wai Pin discloses the low speed milling of target tissue (¶52) between about 20 and 80 rpm without the application of irrigation solution to the tools, loose tissue particles or the tissue surrounding the mill hole or cavity during the act of low speed milling. It is commonly known in the art the use of low speed milling is advantageous because it creates less heat on the target tissue which results in less opportunity for heat damage to the target tissue and possibly avascular necrosis of the target tissue.

Further, Jorneus et al. in view of Yeung Wai Ping fail to disclose alone or in combination the tissue particles displaced or extracted as a result of the milling process are collected for subsequent use in other surgical processes, the recovery of the tissue is not being dependent on the use of suction machines and being based on that the tissue displaced or extracted during the milling process is housed in the milling tool as a result of the retentive design of the tool, so that when the tool is taken out these particles are extracted from it and can be used or stored as appropriate for other surgical uses, and the tissue particles collected during the milling process are mixed with Plasma Rich in Growth Factors or with other biological materials for desirable medical purposes.

Meller discloses the collection of displaced or extracted tissue particles as a result of the milling process and are collected for subsequent use in other surgical

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processes (figures 1-6, ¶3-6, and 72) and being housed in the milling tool as a result of the retentive design of the tool (figures 1-6), so that when the tool is taken out these particles are extracted from it and can be used or stored as appropriate for other surgical uses, and the tissue particles collected during the milling process are mixed with Plasma Rich in Growth Factors or with other biological materials for desirable medical purposes (figures 1-6, ¶3-6, and 72).

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Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the method of Jorneus et al. to be performed at a low speeds without irrigation of the he tools, loose tissue particles or the tissue surrounding the mill hole or cavity as taught by Yueng Wai Ping because it creates less heat on the target tissue which results in less opportunity for heat damage to the target tissue and possibly avascular necrosis of the target tissue. Further, it would have been obvious to one or ordinary skill in the art at the time the invention was made to have the method of Jorneus et al. to including collection of collecting the tissue particles displaced or extracted as a result of the milling process for subsequent use in other surgical processes, the recovery not being dependent on the use of suction machines and so that when the tool is taken out these particles are extracted from it and can be used or stored as appropriate for other surgical uses as taught by Meller to better fixate the implant within the milled out surgical site.

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### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **See attached PTO-892**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW LAWSON whose telephone number is (571)270-7375. The examiner can normally be reached on M-F, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Barrett can be reached on 571-272-4746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. L./ Examiner, Art Unit 3775 /Thomas C. Barrett/ Supervisory Patent Examiner, Art Unit 3775